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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,761	03/30/2001	Akihiro Furukawa	109133	3856

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EXAMINER

ZHONG, CHAD

ART UNIT	PAPER NUMBER
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2152

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,761

Applicant(s)

FURUKAWA ET AL.

Examiner

Chad Zhong

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-9 are presented for examination, This action is responsive to communications: Amendment, filed on 02/17/2005.
2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.
3. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claim 1-2, and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (hereinafter AAPA), in view of Deering, RFC 966, 1985.
6. As per claim 1, AAPA teaches an IP address setting device:

a request packet transmitting unit that transmits a request packet to a particular broadcast address, the request packet requesting transmission of an MAC address from each node of the network (Fig 1, wherein the requests and responses are done in broadcast);

a response reception unit that receives responses from the nodes to the request packet transmitted by

the request packet transmitting unit, each response including the MAC address of the corresponding node (Fig 1, wherein the MAC addresses are returned);

an address information designation unit that, based on the responses received from the nodes by the response reception unit, designates a node to be set with address information including an IP address and that designates the address information (Fig 1, wherein the IP addresses of the nodes are set); and

a setting packet transmission unit that transmits a setting packet to the particular broadcast address, the setting packet including the address information set by the address information designation unit and the MAC address included in the response from the node (Fig 1).

AAPA use broadcast instead of Multicast to transmit the request and setup packets

However, Deering teaches using multicast in place of broadcasting packets within the network in order to reduce overhead and network latency, see for example, pg 12, 1st paragraph.

It would have been obvious to combine teachings of AAPA and Deering in order to allow reduction in overhead on the network. Multicast requires a designated multicast address (pg 7, 4th paragraph), hence, AAPA as modified would have had a designed multicast address for transmit the request and setting packets as claimed.

7. As per claim 2, AAPA teaches an IP address setting device as claimed in claim 1, wherein the address information designation unit includes:

a display that displays a list with at least a portion of nodes that transmitted response packets (pg 1 specification, lines 14-20);

a selection unit that enables a user to select from the list the node to be set with address information (pg 1, specification, lines 14-20); and

an address information setting unit that sets address information separately to the selected node (Fig 1, wherein the IP address of the network devices are set in accordance with the received MAC address).

8. As per claim 4, AAPA teaches an IP address setting device as claimed in claim 1, the address information designation unit designates address information including an IP address, a subnet mask, and a default gateway (see for example, Fig 1, these information are set using the message sent to the destination devices).

9. As per claim 5, AAPA teaches an IP address setting device as claimed in claim 1, further comprising:

a response unit that transmits to the particular broadcast address a response packet including an MAC address of a network printer connected at a node that is a member of the particular multicast address (see Fig 1);

a packet reception unit that receives, at the node, packets from the particular broadcast address and that determines whether a received packet includes the MAC address of the network printer (see Fig 1); and

an IP address setting unit that, when the packet content determination unit determines that a received packet includes the MAC address of the network printer, sets the address information including the IP address in the setting packet as address information of the network printer (see Fig 1).

AAPA does not explicitly teaches Multicast addresses, however, the rational to combine is taught in reference to claim 1 above.

12. As per claim 6, AAPA teaches an IP address setting method comprising:

judging whether the MAC address in the received setting packet is the same as the MAC address of the node (see Fig 1); and

setting the address information in the setting packet as the address information of the node when the MAC address in the received setting packet is the same as the MAC address of the node (Fig 1).

11. As per claim 7, claim 7 is rejected for the same reasons as rejection to combination of claims 2 and 5 above respectively.

10. As per claim 8, claim 8 is rejected for the same reasons as rejection to combination of claims 1, and 5 above respectively.

12. As per claim 9, claim 9 is rejected for the same reasons as rejection to combination of claims 1, 5, 6 above.

11. Claim 3, is rejected under 35 U.S.C. 102(e) as being unpatentable over Applicant Admitted Prior Art (hereinafter AAPA), in view of Deering, RFC 966, 1985, further in view of Boucher et al. (hereinafter Boucher), US 6,434,620.

12. As per claim 3, AAPA and Deering does not explicitly teach an IP address setting device as claimed in claim 1, wherein the address information designation unit includes a display unit that displays in a list at least a portion of network printers at nodes that transmitted a response packet, even though AAPA shows strong motivation of doing so as the printer MAC addresses are sent back to the host computer. Moreover, within Applicant's Specification, host computer 300 is said to have a display device.

Boucher teaches displaying at least a portion of network nodes that transmitted a response packet (Col. 56, lines 51-63, wherein the network monitoring aspect of Boucher displays the response received).

It would have been obvious to combine teachings of AAPA, Deering and Boucher in order to provide for appropriate display of the network conditions, see for example, Col. 56, lines 40-65.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "Device and Method for using MAC address of networked devices to set IP addresses".


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|------|------------|------------------|
| i. | US 5982773 | Nishimura et al. |
| ii. | US 5835725 | Chiang et al. |
| iii. | US 6577642 | Fijolek et al. |
| iv. | US 6640251 | Wiget et al. |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BURGESS, GLENTON B can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ
April 26, 2005


Dung C. Dinh
Primary Examiner